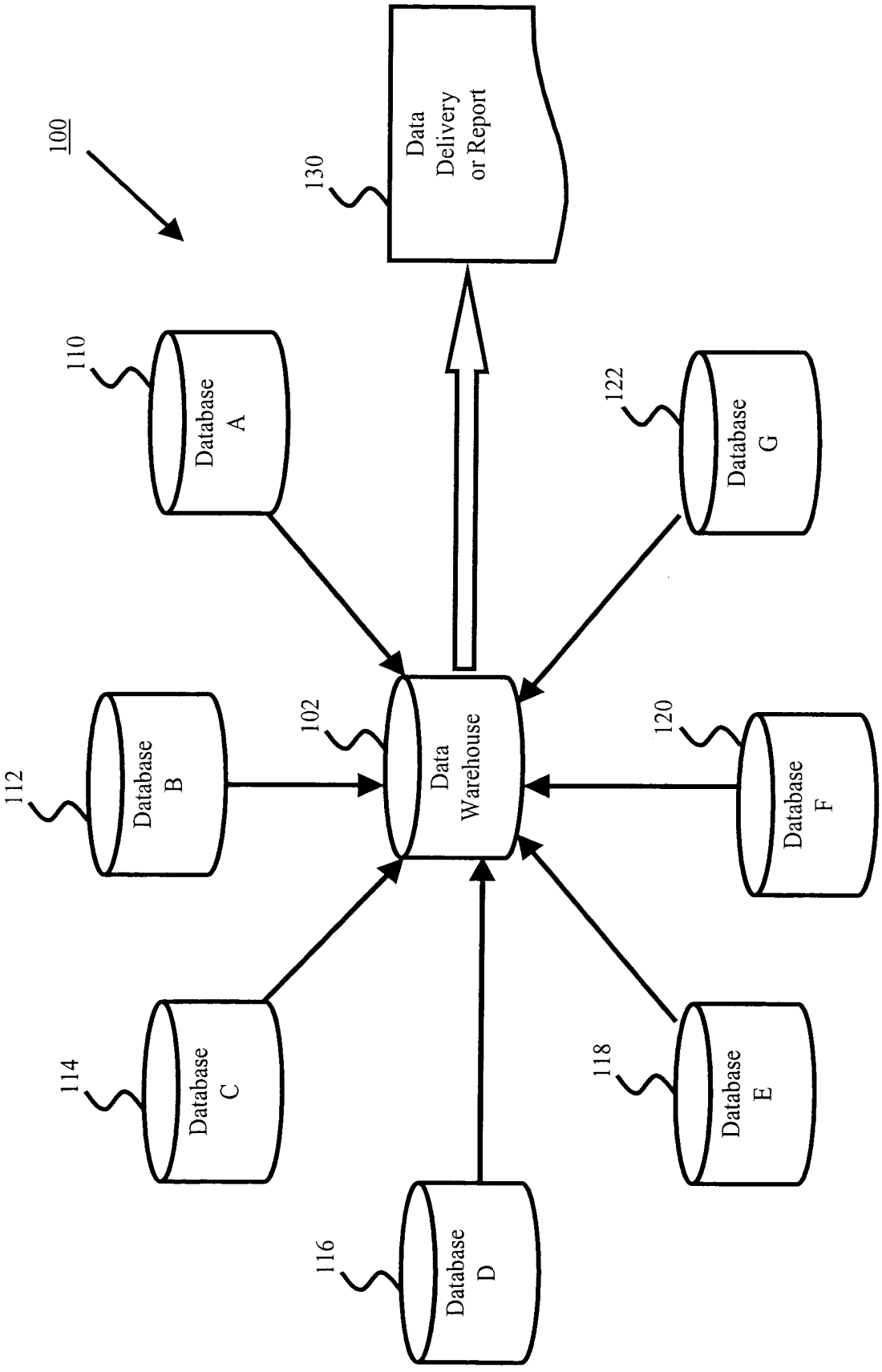
100
130
Data Delivery or Report
110
Database A
122
Database G
102
Data Warehouse
112
Database B
120
Database F
114
Database C
118
Database E
116
Database D

FIG. 1

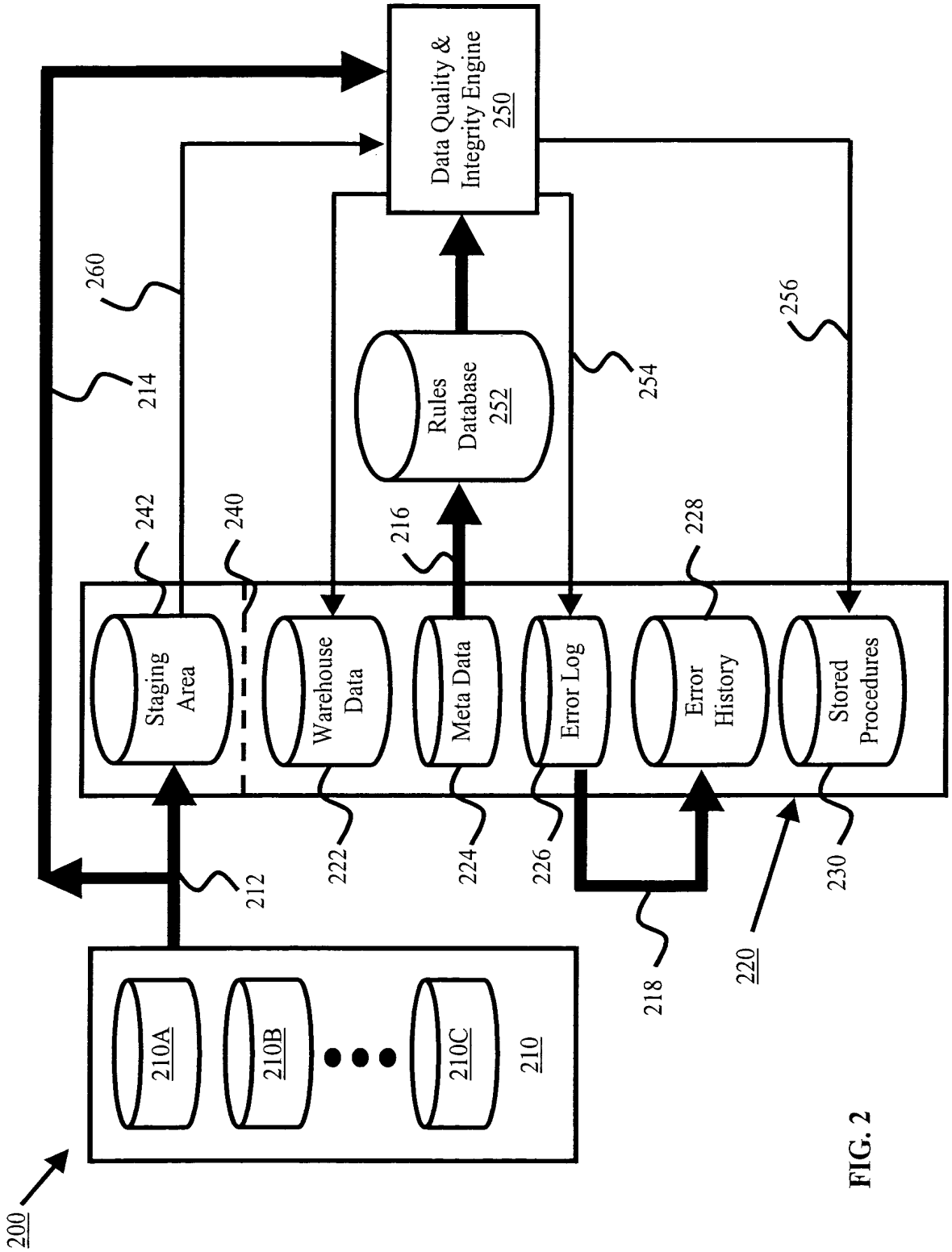
Data Quality & Integrity Engine 250
Rules Database 252
Staging Area
Warehouse Data
Meta Data
Error Log
Error History
Stored Procedures
210A
210B
210C
210
200
212
214
216
218
220
222
224
226
228
230
240
242
254
256
260

FIG. 2

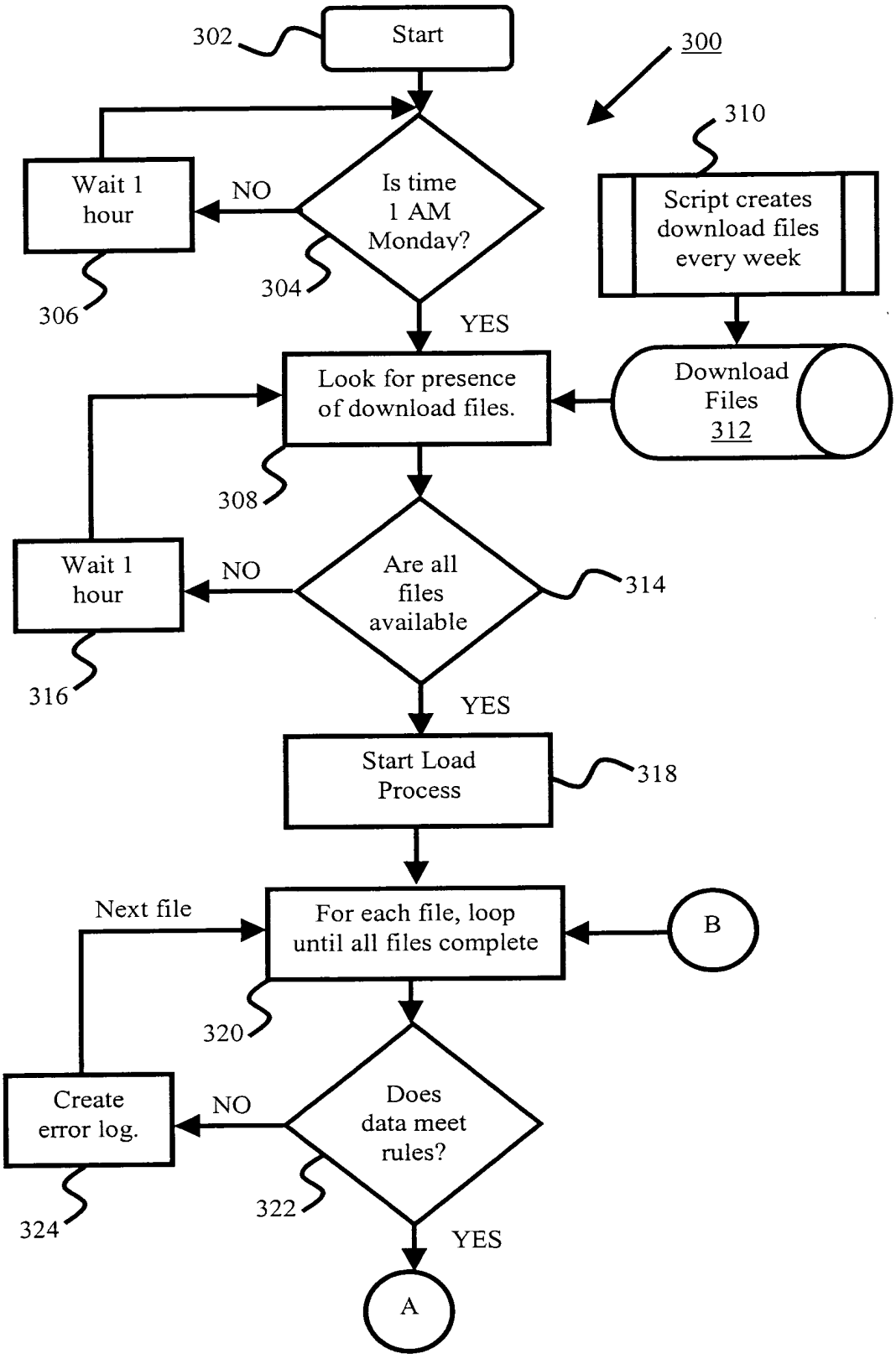
Start
302
300
310
Script creates download files every week
Download Files 312
Is time 1 AM Monday?
NO
Wait 1 hour
306
304
YES
Look for presence of download files.
308
Are all files available
314
NO
Wait 1 hour
316
YES
Start Load Process
318
Next file
For each file, loop until all files complete
B
320
Does data meet rules?
NO
Create error log.
324
322
YES
A

FIG. 3A

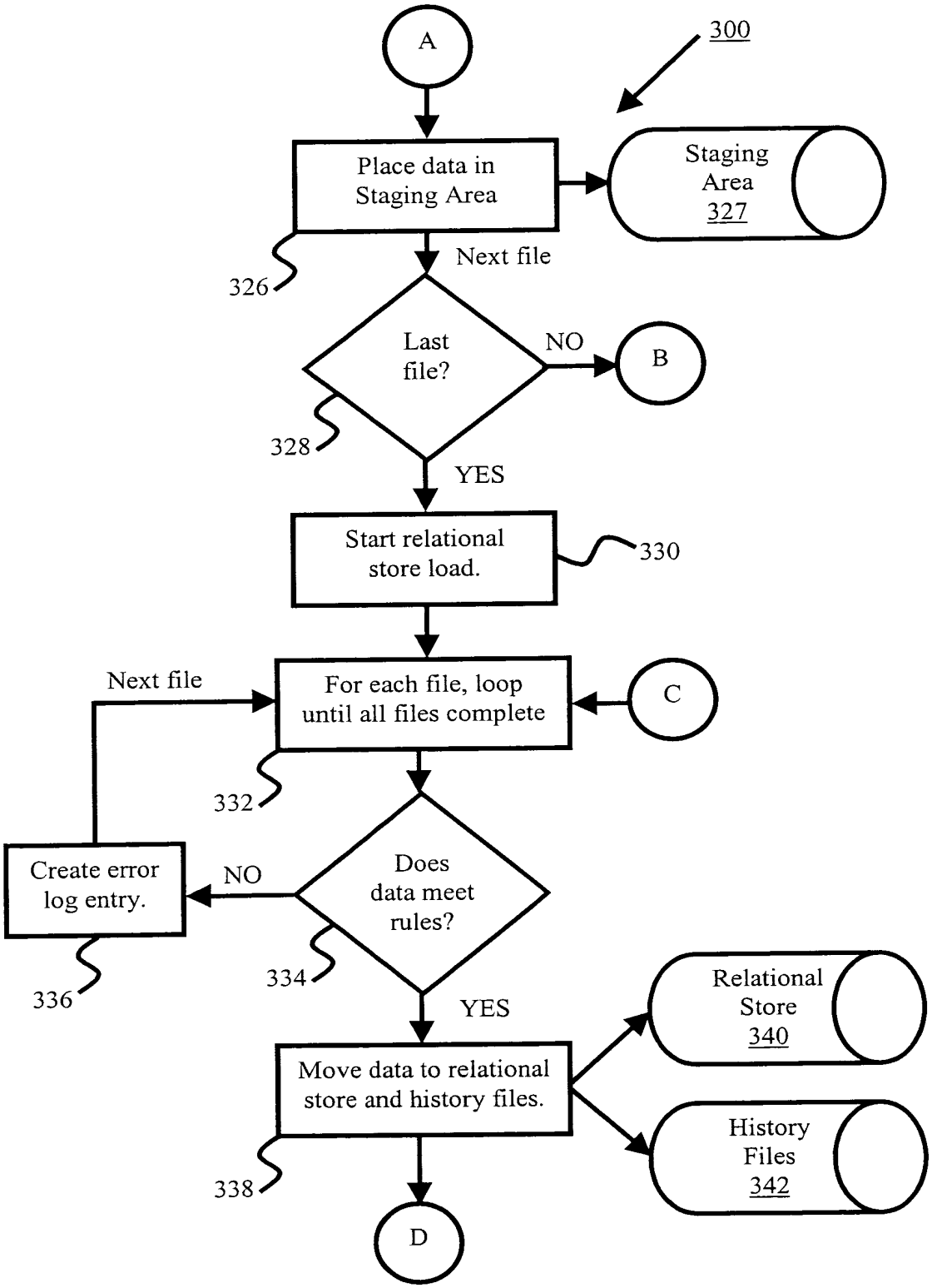
A
300
Place data in Staging Area
Staging Area 327
326
Next file
Last file?
NO
B
328
YES
Start relational store load.
330
Next file
For each file, loop until all files complete
C
332
Create error log entry.
NO
Does data meet rules?
336
334
YES
Relational Store 340
Move data to relational store and history files.
History Files 342
338
D

FIG. 3B

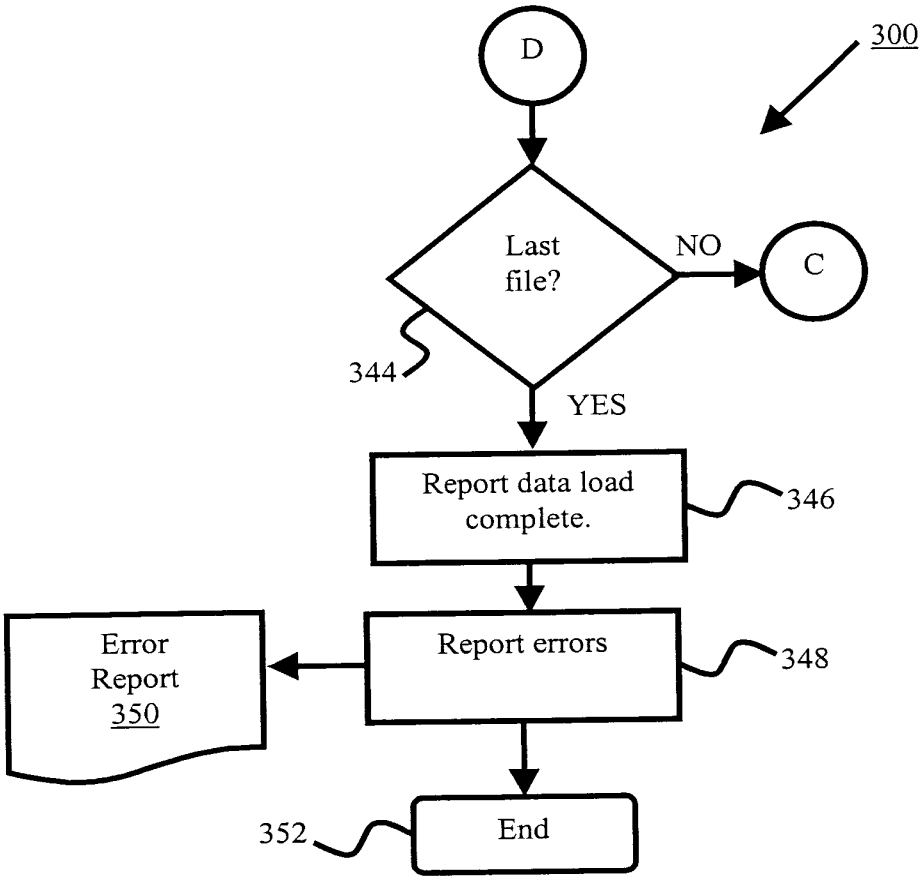
D
300
Last file?
NO
C
344
YES
Report data load complete.
346
Error Report 350
Report errors
348
352
End

FIG. 3C

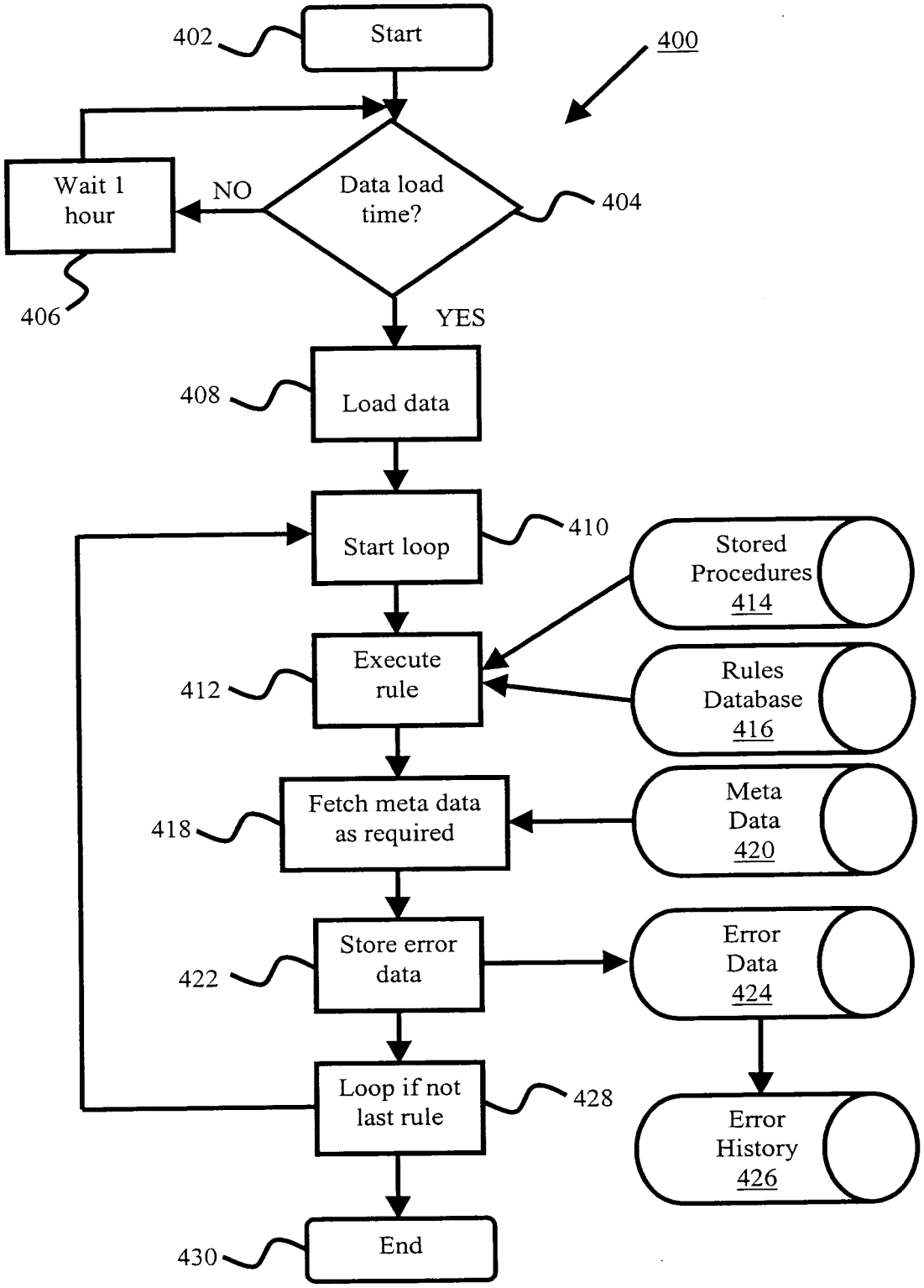
402
Start
400
Wait 1 hour
NO
Data load time?
404
406
YES
408
Load data
Start loop
410
Stored Procedures 414
Execute rule
412
Rules Database 416
Fetch meta data as required
418
Meta Data 420
Store error data
422
Error Data 424
Loop if not last rule
428
Error History 426
End
430

FIG. 4

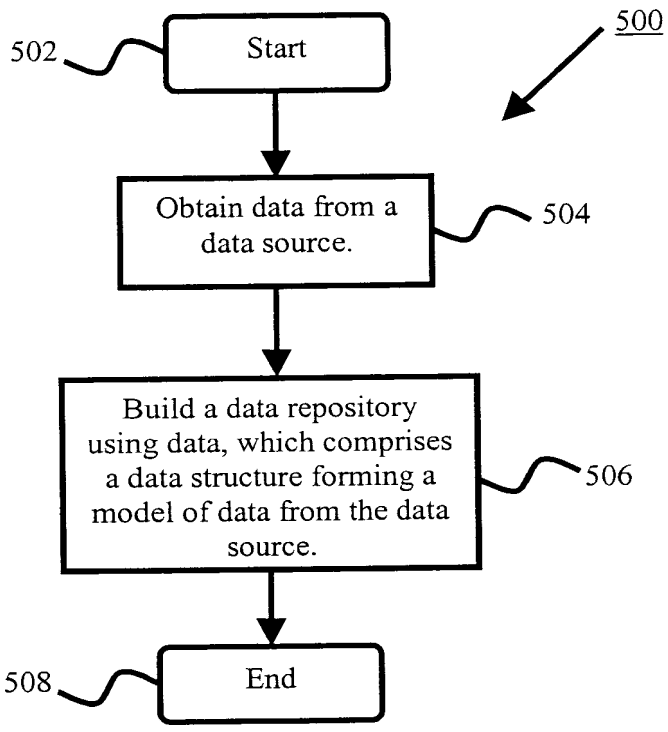
500
502
Start
Obtain data from a data source.
504
Build a data repository using data, which comprises a data structure forming a model of data from the data source.
506
508
End

FIG. 5

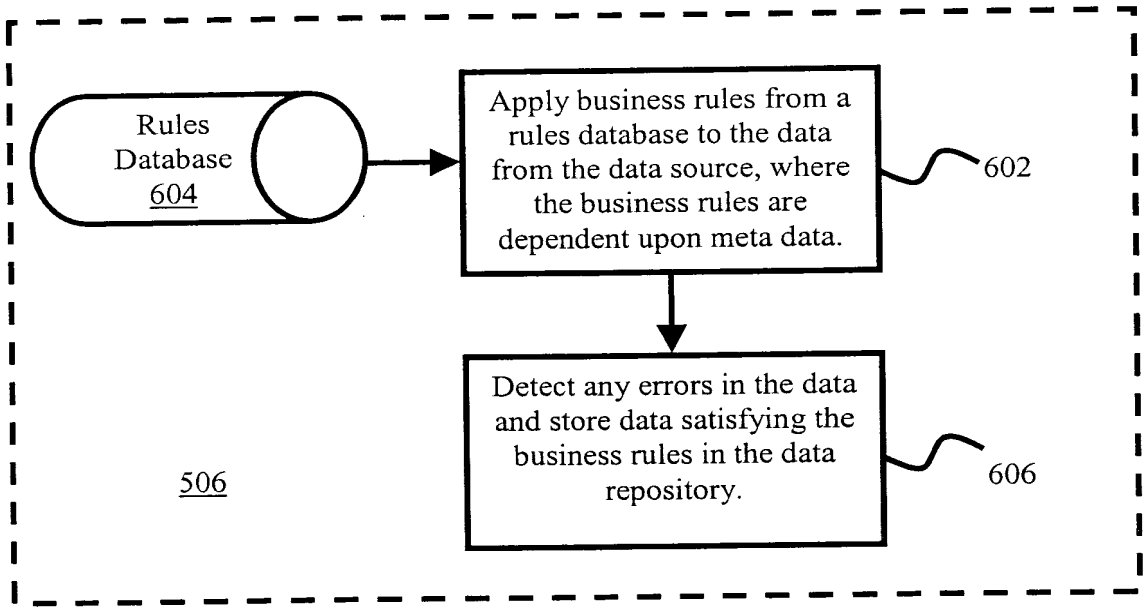
Rules Database 604
Apply business rules from a rules database to the data from the data source, where the business rules are dependent upon meta data.
602
Detect any errors in the data and store data satisfying the business rules in the data repository.
606
506

FIG. 6

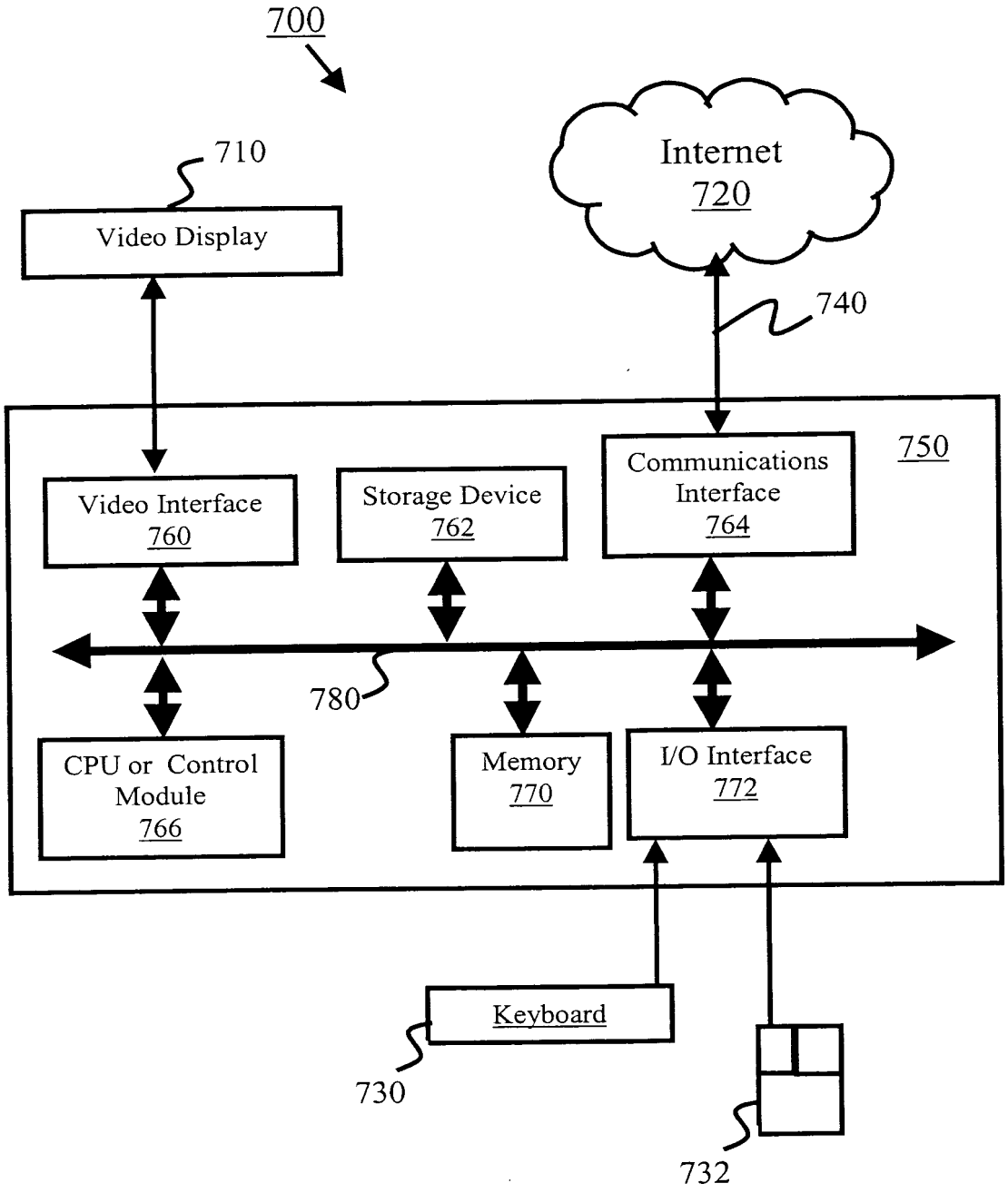
700
710
Video Display
Internet
720
740
750
Video Interface
760
Storage Device
762
Communications
Interface
764
780
CPU or Control
Module
766
Memory
770
I/O Interface
772
Keyboard
730
732

FIG. 7